

AMENDMENTS TO THE CLAIMS

1-15. (Canceled)

16. (Currently Amended) A method for separation of a fluid comprising oil and water, in connection with ~~the~~ extraction of such a fluid containing drops of water in oil or oil in water from formations under earth's ~~the surface of the earth or the~~ sea bed, in which the fluid is transported in a supply pipe or transport pipe (4) to a separator (1), and wherein ~~the~~ separated water and oil are passed out of the separator separately via outlet pipes, wherein the fluid, when upstream of the separator, (1) is subjected to shear forces so that ~~the~~ drops in the fluid supply ~~flow~~ are torn up to form new drops that have a diameter that is less than a third of their original diameter and are so small that an the interface of the drops generally becomes new and uncontaminated by surfactants.

17. (Currently Amended) A method as claimed in claim 16, wherein the shear forces are supplied by ~~means of~~ a phase inversion device (6).

18. (Previously Presented) A method as claimed in claim 17, wherein the phase inversion device is in the form of a valve.

19. (Currently Amended) A method as claimed in claim 17, wherein, upstream of the phase inversion device (6), water is supplied via a supply pipe (5) to, the fluid.

20. (Currently Amended) A method as claimed in claim 17, wherein de-emulsifier is added to the fluid before or after the fluid has passed through the phase inversion device (6) to prevent the ~~phase inverted~~ fluid from inverting back to oil-continuous fluid after having passed through the phase immersion device.

21. (Currently Amended) A method as claimed in claim 16, wherein the separator ~~(1)~~ is in the form of a tubular separator body or a gravitation tank.

22. (Previously Presented) A method as claimed in claim 16, wherein the new drops have a diameter that is less than 10% of their original diameter.

23. (Currently Amended) A method as claimed in claim ~~16~~ 17, wherein re-circulated water is added to the fluid upstream of the phase inversion device.

24. (Previously Presented) A method as claimed in claim 16, wherein the fluid contains drops of oil in water.

25. (New) A method for separation of a fluid that comprises oil and water, the fluid being extracted from under earth's surface or sea bed, and the fluid containing drops of water in oil or drops of oil in water, said method comprising:

transporting the fluid in a supply pipe or transport pipe to a separator and separating oil of the fluid from water of the fluid in the separator;

passing separated oil and water out of the separator via separate outlet pipes;

subjecting the fluid, upstream of the separator, to shear forces such that the drops of water in oil or the drops of oil in water are torn up to form new drops that have a diameter less than a third of their original diameter and are so small that an interface of the new drops generally becomes new and uncontaminated by surfactants.

26. (New) The method of claim 25, wherein said subjecting the fluid to shear forces comprises using a phase inversion device to subject the fluid to shear forces.

27. (New) The method of claim 26, wherein the phase inversion device comprises a valve.

28. (New) The method of claim 26, further comprising supplying water to the fluid upstream of the phase inversion device.

29. (New) The method of claim 26, further comprising adding a de-emulsifier to the fluid either before or after the fluid has passed through the phase inversion device to prevent the fluid from inverting back to an oil-continuous fluid after having passed through the phase inversion device.

30. (New) The method of claim 25, wherein the separator comprises a tubular separator body or a gravitation tank.

31. (New) The method of claim 25, wherein the new drops have a diameter that is less than 10% of their original diameter.

32. (New) The method of claim 26, further comprising supplying re-circulated water to the fluid upstream of the phase inversion device.

32. (New) The method of claim 25, wherein the fluid contains drops of oil in water.